

IN THE SPECIFICATION

Please amend the specification as detailed below.

On Page 11, line 21 to Page, 12, line 3, please replace the paragraph with the following:

If path P is determined to be open, path P, by definition, has two open ends. Accordingly, weld bead modeling function 114 first locates the two open ends, block 604. Then, weld bead modeling function 114 determines which one of the two open ends is closest to the user's pick point, block 606 (see also Fig. 8a). In various implementations, weld bead modeling function 114 selects the vertex that is closest to the user's pick point as GS (the user's pick point is an actual point on the face where the user clicked first to select the faces to weld), block 608. Additionally, weld bead modeling function 114 selects the other open end as GE, block 609.

On Page 12, lines 7-15, please replace the paragraph with the following:

If path P is determined to be closed, weld bead modeling function 114 proceeds to determine whether path P is a single or multiple segment path, block 610. A closed single segment path has only one vertex (see also Fig. 8b). In various implementations, weld bead modeling function 114 initializes that single vertex as both GS and GE, block 612. For closed multi-segmented paths (see also Fig. 8c), weld bead modeling function 114 determines the vertex whose name value is the lowest and the next lowest. In various implementations, the vertex names are integers. Weld bead modeling function 114 selects the vertex with the lowest value as GS, ~~block 614~~ block 613, and the vertex with the next lowest value as GE, ~~block 616~~ block 614.

On Page 12, lines 16-21, please replace the paragraph with the following:

Regardless of, whether path P is open, or a closed single/multi segment, after selection, the start-index of GS is cached/stored, block 616. As will be described in more detail below, the cached/stored GS facilitates establishment of the invariant weld bead generation direction, and in turn, facilitates the persistent and proper naming of the sub-paths during re-computes of the model (due to e.g. user editing and modification to the weld parameters).